

### **Remarks**

Claims 1-20 were pending.

Applicants have amended claim 1 to recite a method of detecting a cancer marker, the method comprising detecting an expression profile of at least one gene in a cancer tissue from a human subject, wherein said at least one gene is selected from the group consisting of NEK2, PLK1, ATR, and CHEK1. Support for the amendments to claim 1 is found in the original application at least, for example, at pages 9-11, 14-15, 18-19, 23, and 30-32. Applicants have amended claims 5 and 7 to alter claim dependencies. Applicants have canceled claims 2-4 and 8-20 without prejudice to Applicants' right to pursue their subject matter in the present application and in other applications.

Applicants have added new claims 21-25. Support for new claim 21 is found in the original application at least in original claim 1. Support for new claim 22 is found in the original application at least in original claims 1 and 3 and at pages 9, 23, 31 and 32. Support for new claim 23 is found in the original application at least at page 31. Support for new claim 24 is found in the original application at least at pages 23, 29, 31-32, 39-48, 55-60, and 90. Support for new claim 25 is found in the original application at least at pages 41-47, 55-60 and 90.

Applicants submit no new matter is added by the present amendment. Upon entry of the present amendment, claims 1, 5-7, and 21-25 will be pending and presented for consideration.

### **Restriction requirement**

The Office action required restriction to one of 18 inventions defined by claim groups. Applicants elect the invention of Group I, which was identified in the Office action as including claims 1-8.

If Applicants elect Group I, the Office action requires Applicants to select up to 10 sequences for examination, stating that claim 4, among other claims, was "drawn to claims reciting different combinations of individual" sequences. Claim 4, as previously pending, provided that "said at least one gene includes one or more genes selected from Table 1." Applicants select, for examination, that said at least one gene includes one or more genes selected from NEK2, PLK1, ATR, and CHEK1. Exemplary cDNA and amino acid sequences

corresponding to these genes, as recited in Table 1, include SEQ ID NOs:1; 12; 26; 31; 45; 56; 70; and 75.

Applicants understand that they will receive examination of all four of these genes, individually or in any combination, consistent with M.P.E.P. § 803.04, which provides that “normally ten sequences constitute a reasonable number for examination purposes,” and consistent with the statement in the Office action that Applicants’ selection is “not to exceed ten sequences.” If, on the other hand, Applicants are not being granted examination of all four of these genes individually (i.e. if a selection of four genes would be taken as a limitation that all four genes must be detected in the practice of the invention), then Applicants instead select NEK2 and traverse the restriction as inconsistent with M.P.E.P. § 803.04. As provided in Table 1, SEQ ID NOs: 26 and 70 correspond to NEK2.

Applicants respectfully request clarification of the restriction in the next communication from the Office.

Examiner Humphrey is invited to telephone the undersigned attorney to discuss any remaining issues.

Respectfully submitted,

Date: November 22, 2006  
Reg. No. 48,645

Tel. No.: (617) 261-3169  
Fax No.: (617) 261-3175



Brian Fairchild, Ph.D.  
Attorney for Applicants  
Kirkpatrick & Lockhart Nicholson  
Graham LLP  
State Street Financial Center  
One Lincoln Street  
Boston, Massachusetts 02111-2950